

AMENDMENTS TO THE CLAIMS

In the claims, please amend claims 5 and 12 as follows:

- 1-4. (canceled)
5. (currently amended) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro consisting of:
- a) forming a styrene-maleic anhydride random copolymer;
 - b) reacting hydrophobic amines or hydrophobic alcohols with anhydride monomers in the copolymer thereby forming a membrane active ~~polymer~~ polyanion capable of lysing mammalian cell membranes at pH 6.5; and
 - c) contacting said cell with said polynucleotide and said membrane active ~~polymer~~ polyanion such that the ~~compound~~ polynucleotide and the ~~polymer~~ membrane active polyanion are endocytosed by the cell.
6. (canceled)
7. (previously presented) The process of claim 5 wherein the hydrophobic amines consist of alkyl amines.
8. (previously presented) The process of claim 7 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
- 9-11. (canceled)
12. (currently amended) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro consisting of:
- a) forming a butyl vinyl ether-maleic anhydride alternating copolymer;
 - b) reacting hydrophobic amines or hydrophobic alcohols with anhydride monomers in the copolymer thereby forming a membrane active ~~polymer~~ polyanion capable of lysing mammalian cell membranes at pH 6.5; and
 - c) contacting said cell with said polynucleotide and said membrane active ~~polymer~~ polyanion such that the ~~compound~~ polynucleotide and the ~~polymer~~ membrane active polyanion are endocytosed by the cell.
- 13.-15. (canceled)
16. (previously presented) The process of claim 12 wherein the hydrophobic amines consist of alkyl amines.
17. (previously presented) The process of claim 12 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
- 18-20. (canceled)

21. (previously presented) The process of claim 8 wherein the functional group is selected from the group consisting of: targeting groups, steric stabilizers, membrane active compounds, and reactive groups.
22. (previously presented) The process of claim 17 wherein the functional group is selected from the group consisting of: targeting groups, steric stabilizers, membrane active compounds, and reactive groups.